3/5/1

DIALOG(R) File 351: Derwent WPI

(c) 2004 Thomson Derwent. All rts. reserv.

010280813

WPI Acc No: 1995-182071/199524

XRAM Acc No: C95-084069

Aspergillus kawachii alpha-amylase gene and transformant - for recombinant prodn. of acid-resistant, thermostable enzyme useful for direct saccharification of starch to produce alcoholic beverages

Patent Assignee: JOZO SHIGEN KENKYUSHO KK (JOZO-N); KOKUZEI CHO CHOHAN (KOKU-N)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No Kind Date Applicat No Kind Date Week JP 7099979 A 19950418 JP 93265447 A 19930930 199524 B

Priority Applications (No Type Date): JP 93265447 A 19930930

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 7099979 A 7 Cl2N-015/09

Abstract (Basic): JP 7099979 A

The 2016 nucleotide sequence shown in the specification (coding for the alpha-amylase enzyme of Aspergillus kawachii) is new. More specifically, the sequence is cDNA synthesised from alpha-amylase mRNA of A. kawachii (IFO 4308) being contained in a Saccharomyces cerevisiae vector.

Also claimed is S. cerevisiae transformed with a vector as above and producing an alpha-amylase with the following properties: acid resistant at pH 2-7, 80% heat resistant at 60deg. C for 60 min. and degrades raw starch.

USE - The alpha-amylase enzyme, alcohol and alcoholic beverages can all be efficiently produced using the transformed yeast cells.

ADVANTAGE - The enzymes allows direct saccharification of starch

for the prodn. of alcohol and alcoholic beverages. ${\sf Dwg.}\,0/4$

Title Terms: ASPERGILLUS; ALPHA; AMYLASE; GENE; TRANSFORM; RECOMBINATION; PRODUCE; ACID; RESISTANCE; THERMOSTABLE; ENZYME; USEFUL; DIRECT; SACCHARIFICATION; STARCH; PRODUCE; ALCOHOLIC; BEVERAGE

Derwent Class: D16

International Patent Class (Main): C12N-015/09

International Patent Class (Additional): C12N-001/19; C12N-009/28;

C12N-015/09; C12R-001-66; C12R-001-865

File Segment: CPI